BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Improvements to Roads and Drain at Srinivaspura Village in ward No. 05

			Estimate Cost Rs.						9900000.00
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Road Surface for CC road		1	130.00	5.00	0.23	149.50		
			1	130.00	5.00	0.23	149.50		
			1	140.00	5.00	0.23	161.00		
	For Asphat road		3	150.00	5.00	0.20	450.00		
	For Culverts		4	6.20	2.10	0.90	46.87		
	For RCC Drain		1	387.00	0.90	0.90	313.47		
	For Road Cutting Portion		3	150.00	0.90	0.45	182.25		
							1452.59	137.80	**200167.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
5	KSRRB M600-3. Construction of Rolled Cement Concrete mix 1:4:8 OPC cement @180kgs, with 25mm and down size graded granite metal coarse aggregate at 0.85cum and fine aggregates @0.57cum base course with coarse and fine aggregate conforming to IS:383, aggregate cement ratio 12:1 and minimum cement content of 180kg/ cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength, finishing and curing complete as per specifications - No. 175/ Item No. 22.3/ PWD SR 2018-19	**Cum**							
	For CC Road		1	130.00	5.00	0.15	97.50		
			1	130.00	5.00	0.15	97.50		
			1	140.00	5.00	0.15	105.00		
	For Culverts		4	6.20	2.10	0.15	7.81		
	RCC Drains		1	387.00	0.90	0.15	52.25		
							360.06	3606.12	**1298409.00**
	Basic Rate	3402.00							
	Area Weightage @ 6%	204.12							
	Total	**3606.12**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB 5.2.3 Providing and constructing granite / trap / basalt Size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 25/ Item No. 5.6/ PWD SR 2018-19	cum							
	Culverts		4X2	6.20	0.60	0.50	14.88		
							14.88	4871.76	**72492.00**
	Basic Rate	4596.00							
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							
4	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25/ Item No. 5.9/ PWD SR 2018-19	**Cum**							
	For Culverts		4X2	6.20	0.50	0.45	11.16		
							11.16	**5305.30**	**59207.00**
	Basic Rate	5005.00							
	Area Weightage @ 6%	300.30							
	Total	**5305.30**							
5	KSRB 4-6.7 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1 m in depth including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 17/ Item No. 4.34/ PWD SR 2018-19	**Sqm**							
	For RCC Drains		2X2	387.00	0.60		928.80		
	For Culverts		4	6.20	0.60		14.88		
	For Sides		4X2	6.20	0.23		11.41		
			4X2	1.65	0.23		3.04		
							958.12	**309.52**	**296559.00**
	Basic Rate	**292.00**							
	Area Weightage @ 6%	17.52							
	Total	**309.52**							
6	KSRB 4-1.7 : : Providing and laying in position plain cement concrete of mix 1:3:6 withOPC cement @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @0.56cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2/P No. 13/ Item No. 4.7/ PWD SR 2018-19	**cum**							
	For RCC Drain Vent		1	387.00	0.90	0.10	34.83		
	Culverts		4X2	6.20	0.50	0.15	3.72		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Vent Bed		4	6.20	0.90	0.10	2.23		
							40.78	5627.54	**229502.00**
	Basic Rate	5309.00							
	Area Weightage @ 6%	318.54							
	Total	**5627.54**							
7	KSRB 15.1.3: Providing FLush pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 115/ Item No. 15.1/ PWD SR 2018-19	Sqm							
	Culverts		4X2	6.20		0.50	24.80		
							24.80	223.66	**5547.00**
	Basic Rate	211.00							
	Area Weightage @ 6%	12.66							
	Total	**223.66**							
8	KSRB 4.2.2 : Providing and laying in position plain cement concrete of mix M20 withOPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @0.459cum with superplastesisre @ 3lts conforming to IS9103-1999Reffirmed machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls(any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour HOM of machinery, curing, complete as per specifications. Specification. No. KBS 4.1,4.6, No. KBS 4.1,4.6, No. 14/ Item No. 4.11/ PWD SR 2018-19	**Cum**							
	For New RCC Drains								
	Bottom Concrete		1	387.00	0.90	0.15	52.25		
	Side Walls		1X2	387.00	0.15	0.60	69.66		
	For Cuvlerts		4	6.20	1.80	0.23	10.27		
							132.17	5998.54	**792840.00**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							
9	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 18/ Item No. 4.46.2/ PWD SR 2018-19	**Tonne**							
	0.65Ton/Cum		0.065	132.17			**8.59**	75223.96	**646264.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	70966.00							
	Area Weightage @ 6%	4257.96							
	Total	**75223.96**							
10	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shutterng machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications c.c 1:1.5:3 Including all cost of Matirial (DATA RATE ENCLOSED) 10cm thick RCC pre cast slab	Sqm							
	For RCC Drain		1	387.00	0.90		348.30		
							348.30	2100.00	**731430.00**
	Data Rate	**2100.00**							
11	Providing and laying cement concrete using 20mm and down size granite jelly of ready mixed concrete (RMC)for R.C.C works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 for raft foundation, column footing, main and secondary beams. Page No. 18/ Item No. 4.48/ PWD SR 2018-19	Cum							
	For CC Road		1	130.00	5.00	0.10	65.00		
			1	130.00	5.00	0.10	65.00		
			1	140.00	5.00	0.10	70.00		
							200.00	5770.64	**1154128.00**
	Basic Rate	5444.00							
	Area Weightage @ 6%	326.64							
	Total	**5770.64**							
12	KSRRB M2600-3: (ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specification complete as per specifications, MORTH specification No. 2605, No. 233/ Item No. 31.3 PWD SR 2018-19	M							
	For CC Road		20	5.00			100.00		
			20	5.00			100.00		
			25	5.00			125.00		
							325.00	126.14	**40996.00**
	Basic Rate	119.00							
	Area Weightage @ 6%	7.14							
	Total	**126.14**							
13	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift No. 171/ Item No. 22.7/ PWD SR 2018-19	Sqm							
	For CC Road		1	130.00	5.00		650.00		
			1	130.00	5.00		650.00		
			1	140.00	5.00		700.00		
							2000.00	**72.08**	**144160.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	**72.08**							
14	KSRRB M400-17: Providing, laying spreading and compacting graded stones aggregate to **wet mix macadam** specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying, in uniform layers with paver in sub base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH specification NO. 406,P No. 155/ Item No. 20.18/ PWD SR 2018-19	Cum							
	For Asphat road		3	150.00	5.00	0.23	517.50		
	For Road Cutting Portion		3	154.00	0.90	0.35	145.53		
							663.03	2001.28	**1326909.00**
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	**2001.28**							
15	KSRRB 500-4: providing and applying **primer coat** from 7.5 to 9.8 kg and 9.8 to 12.2kg per 10 sqm for surfaces of low and medium porosity respectively over prepared surface of granular base with cut bank M.C-70 or any other bitumen mixed with diesel at 10 kg per 10 sqm heated in bitumen boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specificationsDo- Medium Porosity MORTH chapter 5, No. 158/ Item No. 21.6/ PWD SR 2018-19	Sqm							
			3	150.00	5.00		2250.00		
							2250.00	36.04	**81090.00**
	Basic Rate	34.00							
	Area Weightage @ 6%	2.04							
	Total	**36.04**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
16	KSRRB 500-11: Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50 / 75mm compacted thickness with 3.3% bitumen but excluding cost of primer / tack cost with lead upto 1km including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH chapter 5, With 60 / 70 grade bitumen, No. 159/ Item No. 21.11.2/ PWD SR 2018-19	**Cum**							
			3	150.00	3.00	0.05	67.50		
							67.50	6823.44	**460582.00**
	Basic Rate	6318.00							
	Area Weightage @ 8%	505.44							
	Total	**6823.44**							
17	KSRRB 500-9: providing and applying tack coat on granular base such as WBM and WMM surfaces hot bitumen primed at 10 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specifications 5, No.160/ Item No. 21.9/ PWD SR 2018-19	**Sqm**							
			3	150.00	3.00		1350.00		
							1350.00	24.84	**33534.00**
	Basic Rate	23.00							
	Area Weightage @ 8%	1.84							
	Total	**24.84**							
18	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19	**Cum**							
			3	150.00	5.00	0.04	90.00		
							90.00	8869.02	**798212.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	8367.00							
	Area Weightage @ 6%	502.02							
	Total	**8869.02**							
19	KSRRB M100-2. Loading and Unloading of stone boulders by manual means complete as per specification MORTH-100/chapter-1 Page No. 136/ Item No. 17.1/ PWD SR 2018-19	Cum							
			Qty. Vide Item No. 1+2				**1452.59**		
							1452.59	60.42	**87766.00**
	Basic Rate	57.00							
	Area Weightage @ 6%	3.42							
	Total	**60.42**							
							Grand Total		**8459794.00**
20	For 12% Applicable GST								1015175.00
21	For 3% KRIDL Charges								253794.00
22	For 1% Labour Cess								84598.00
23	For 1% DPR and PMC Charges								84598.00
23	Miscesallaneous Charges	L/S							**2041.00**
									9900000.00

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19
3 This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

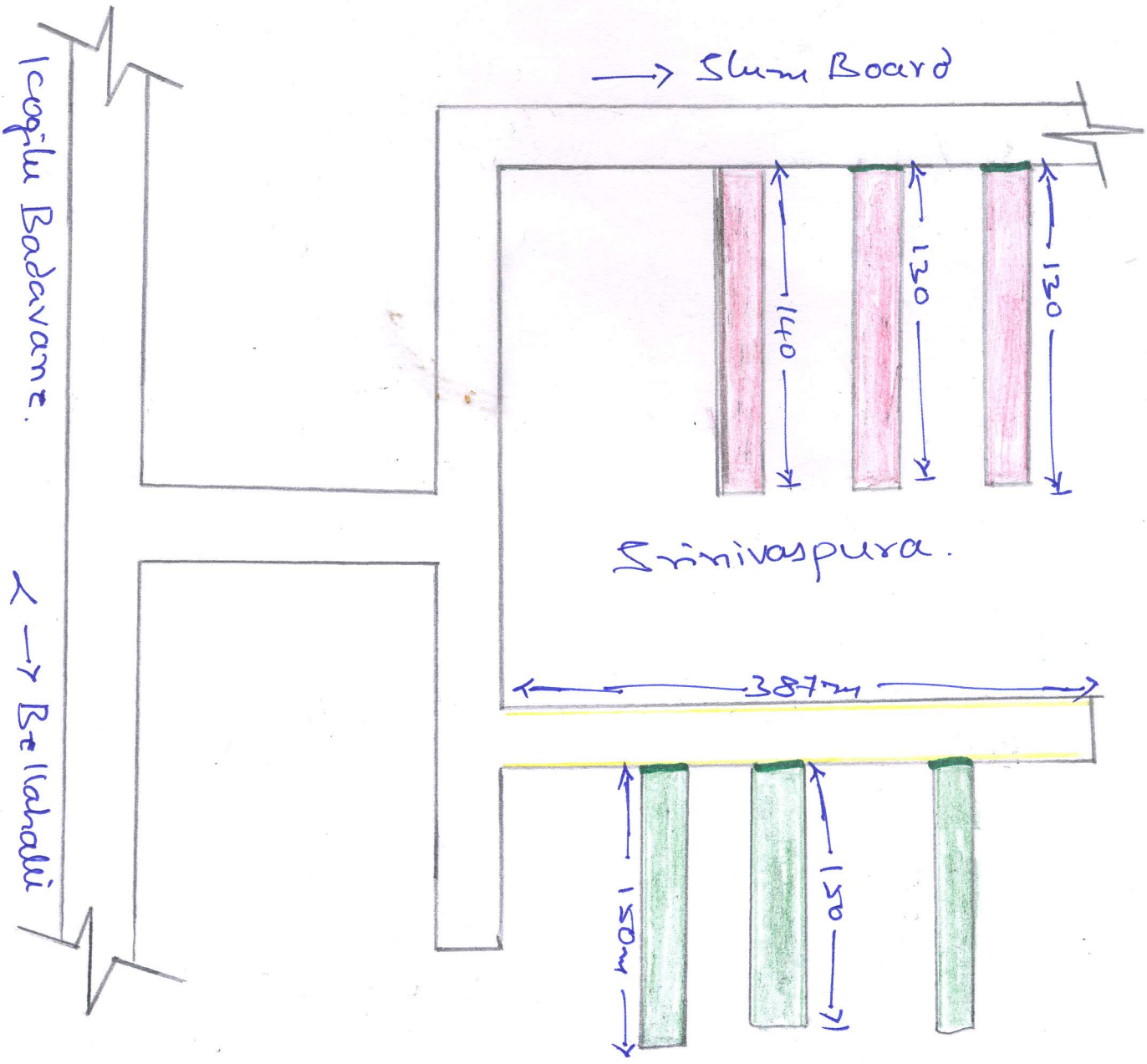
Assistant Engineer
Ward No. 05(Jakkur)

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Assistant Executive Engineer
Byatarayanapura Sub Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Lakhs only
Head of A/c. P3727
Div. Ref. No. 84/19-20 Date 24-10-19
AE EE(BTP) 24/10

Technical Sanction
Accorded For Rs 99 Lakhs only
Head of A/C P3727
CER NO :131 Dt 28-10-2019
TA CE (YNK)



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